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EXAMINER

LEE, ANDREW CHUNG CHEUNG

ART UNIT	PAPER NUMBER
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2619

MAIL DATE	DELIVERY MODE
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11/07/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/903,838

Applicant(s)

FANGMAN ET AL.

Examiner

Andrew C. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-23, 25-38 and 40-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-23, 25-38 and 40-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. In view of the Pre-Brief Appeal filed on 6/13/2007, PROSECUTION IS HEREBY REOPENED. A new ground of rejection set forth below.

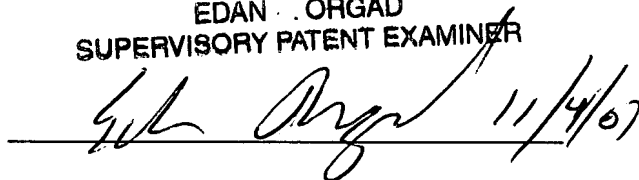
To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

EDAN . ORGAD
SUPERVISORY PATENT EXAMINER

A handwritten signature in cursive script, followed by the date 11/4/07, is written over a horizontal line.

Edan Orgad

Supervisory Patent Examiner

Response to Amendment

2. Claims 1 – 8, 10 – 23, 25 – 38, 40 – 45 are pending.
3. Claims 9, 24, 39 had been canceled.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1 – 8, 10 – 15, 31 – 38, 40 – 45, are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Considering claim 31,

To determine whether the claimed subject matter complies with the is eligibility requirement of 35 USC 101, we ask

Does the claimed invention fall within an enumerated statutory category? The answer is “No”.

As Evidenced at page 57, lines 17 – 21 of the specification, in “include receiving or storing instructions and /or data implemented in accordance with the foregoing description upon a carrier medium. Suitable carrier media include a memory medium as described above, as well as signals such as electrical, electromagnetic, or digital signals, conveyed via a communication medium such as networks and/or a wireless link. Thus, the claimed application in claim 31 is nothing but a software application. It is well established that a

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software application, i.e. computer program, per se is not physical “thing”. The computer program is neither computer components nor statutory processes. Such claimed computer program does not define any structural and functional interrelationship between the computer program and the rest of the computer, which permits the computer program’s functionality to be realized.

In addition, as set forth in the Interim Guidelines page 52, for a computer program to be statutory it must be embedded in a computer readable medium.

Thus, claim 31 is non statutory.

As to claims 1 – 8, 10 – 15, 31 – 38, 40 – 45 these claims are written in a form of “method”. However, as evidenced in claim 1, claims 1 – 8, 10 – 15, 31 – 38, 40 – 45 are claiming software in the form of method. Note that claims 1 – 8, 10 – 15, 31 – 38, 40 – 45 mirrors claim 31 in all respects except for the preamble and in light of the specification it is nothing more than the instructions of the application.

When claim 1 falls within one of the statutory categories, we continue to ask the following question.

Does the claimed invention cover a judicial exception? The answer is “Yes”, i.e. abstract idea- computer program.

Thus, claims 1 – 8, 10 – 15, 31 – 38, 40 – 45 are also nonstatutory since the patent protection sought by the claimed invention is for the computer program in the abstract.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1 – 8, 10 – 23, 25 – 38, 40 – 45 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 – 43 of U.S. Patent No. 7068647 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because the present claims are broader versions of the patent claims.

Regarding claim 1, a comparison of present claim 1 and patent claim 1 shows that, applicant merely broadens the claim 1 of US Patent No. 7068647 B2 by eliminating the limitations of patent claim: "a Service Gateway receiving a data packet from the IP telephone, wherein the data packet comprises a private source IP address of the IP telephone, source port number, and destination information associated with an IP device; the Service Gateway performing a network address persistent port translation (NAPPT) on the data packet, including storing translation information in a data structure, wherein the translation information comprises: the private source IP address of the IP telephone; a public IP address of the Service Gateway; and the assigned ports for the IP telephone; and the Service Gateway sending the data packet to the IP device", and replacing the patent claim 1 limitation "determining if the identifier is valid" with patent claim 8 limitation "determining if a MAC ID for the IP telephone is valid; and if the MAC ID is determined to be valid, then determining if the identifier is valid" (*see U.S. Patent No. 7068647 B2, column 32, lines 35 – 42, column 33, lines 29 – 31*).

Regarding claim 16, a comparison of present claim 16 and patent claim 15 shows that, applicant merely broadens the claim 15 of US Patent No. 7068647 B2 by eliminating the limitations of patent claim: "receive a data packet from the IP telephone, wherein the data packet comprises a private source IP address of the IP telephone, source port number, and destination information associated with an IP device; perform a network address persistent port translation (NAPPT) on the data packet, including storing translation information in a data structure, wherein the translation information comprises: the private source IP address of the IP telephone; a public IP address of the Service Gateway; and the assigned ports for the IP telephone; and the Service Gateway sending

the data packet to the IP device”, and replacing the patent claim 15 limitation “determining if the identifier is valid” with patent claim 22 limitation “determining if a MAC ID for the IP telephone is valid; and if the MAC ID is determined to be valid, then determining if the identifier is valid (see *U.S. Patent No. 7068647 B2, column 34, lines 9 – 242, column 35, lines 10 – 12*).

Regarding claim 31, a comparison of present claim 31 and patent claim 30 shows that, applicant merely broadens the claim 30 of US Patent No. 7068647 B2 by eliminating the limitations of patent claim: “receiving a data packet from the IP telephone, wherein the data packet comprises a private source IP address of the IP telephone, source port number, and destination information associated with an IP device; performing a network address persistent port translation (NAPPT) on the data packet, including storing translation information in a data structure, wherein the translation information comprises: the private source IP address of the IP telephone; a public IP address of the Service Gateway; and the assigned ports for the IP telephone; and the Service Gateway sending the data packet to the IP device”, and replacing the patent claim 30 limitation “determining if the identifier is valid” with patent claim 37 limitation “determining if a MAC ID for the IP telephone is valid; and if the MAC ID is determined to be valid, then determining if the identifier is valid (see *U.S. Patent No. 7068647 B2, column 35, lines 61 – 67, column 36, lines 1 – 3; lines 55 – 57*).

Regarding claim 2, applicant merely copies the limitation of claim 6 of US Patent No. 7068647 B2.

Regarding claims 4, 6, applicant merely broadens the claim 3 of US Patent No. 7068647 B2 by eliminating the limitation “wherein the data packet comprise a public

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destination IP address, a destination port number, and source information, wherein said public destination IP address comprises said public source IP address, and wherein said destination port number comprises said source port number”, and modifies the limitation “performing a network address persistent port translation (NAPPT) on the data packet received from the IP devices; and sending the data packet received from the IP device to the IP telephone to the current claim context (see *U.S. Patent No. 7068647 B2*, column 32, lines 65 – 67, column 33, lines 1 – 9).

Regarding claim 5, applicant merely combines the claims 2 and 3 of US Patent No. 7068647 B2 by replacing the term “public destination” with “private source” in claim 3, and eliminating the limitation “performing a network address persistent port translation (NAPPT) on the data packet received from the IP device; and sending the data packet received from the IP device to the IP telephone” in claim 3.

Regarding claim 8, applicant merely copies the limitation of claim 7 of US Patent No. 7068647 B2.

Regarding claim 10, applicant merely copies the limitation of claim 9 of US Patent No. 7068647 B2.

Regarding claim 11, applicant merely copies the limitation of claim 10 of US Patent No. 7068647 B2.

Regarding claim 12, applicant merely copies the limitation of claim 11 of US Patent No. 7068647 B2.

Regarding claim 13, applicant merely copies the limitation of claim 12 of US Patent No. 7068647 B2.

Regarding claim 14, applicant merely copies the limitation of claim 13 of US Patent No. 7068647 B2.

Regarding claim 15, applicant merely copies the limitation of claim 14 of US Patent No. 7068647 B2.

Regarding claim 17, applicant merely copies the limitation of claim 20 of US Patent No. 7068647 B2.

Regarding claim 19, applicant merely broadens and extracts the limitation from claim 15 of US Patent No. 7068647 B2 by eliminating "wherein the data packet comprises a private source IP address, a source port number, and destination information associated with an IP device; including storing translation information in a data structure, wherein the translation information comprises: the private source IP address of the IP telephone; a public IP address of the Service Gateway; and assigned ports for the IP telephone".

Regarding claim 20, applicant merely combines the claims 2 and 3 of US Patent No. 7068647 B2 by replacing the term "public destination" with "private source" in claim 3, and eliminating the limitation "performing a network address persistent port translation (NAPPT) on the data packet received from the IP device; and sending the data packet received from the IP device to the IP telephone" in claim 3.

Regarding claim 21, applicant merely broadens and extracts the limitation from claim 15 of US Patent No. 7068647 B2 by eliminating "wherein the data packet comprises a private source IP address, a source port number, and destination information associated with an IP device; including storing translation information in a data structure, wherein the translation information comprises: the private source IP address of the IP telephone; a public IP address of the Service Gateway; and assigned ports for the IP telephone"

Regarding claim 23, applicant merely copies the limitation of claim 21 of US Patent No. 7068647 B2.

Regarding claim 25, applicant merely copies the limitation of claim 23 of US Patent No. 7068647 B2.

Regarding claim 26, applicant merely copies the limitation of claim 24 of US Patent No. 7068647 B2.

Regarding claim 27, applicant merely copies the limitation of claim 25 of US Patent No. 7068647 B2.

Regarding claim 28, applicant merely copies the limitation of claim 26 of US Patent No. 7068647 B2.

Regarding claim 29, applicant merely copies the limitation of claim 27 of US Patent No. 7068647 B2.

Regarding claim 30, applicant merely copies the limitation of claim 29 of US Patent No. 7068647 B2.

Regarding claim 32, applicant merely copies the limitation of claim 35 of US Patent No. 7068647 B2.

Regarding claim 34, applicant merely broadens and extracts the limitation from claim 30 of US Patent No. 7068647 B2 by eliminating "wherein the data packet comprises a private source IP address, a source port number, and destination information associated with an IP device; including storing translation information in a data structure, wherein the translation information comprises: the private source IP address of the IP telephone; a public IP address of the Service Gateway; and assigned ports for the IP telephone".

Regarding claim 35, applicant merely combines the claims 2 and 3 of US Patent No. 7068647 B2 by replacing the term "public destination" with "private source" in claim 3, and eliminating the limitation "performing a network address persistent port translation (NAPPT) on the data packet received from the IP device; and sending the data packet received from the IP device to the IP telephone" in claim 3.

Regarding claim 36, applicant merely broadens and extracts the limitation from claim 30 of US Patent No. 7068647 B2 by eliminating "wherein the data packet comprises a private source IP address, a source port number, and destination information associated with an IP device; including storing translation information in a data structure, wherein the translation information comprises: the private source IP address of the IP telephone; a public IP address of the Service Gateway; and assigned ports for the IP telephone".

Regarding claim 38, applicant merely copies the limitation of claim 36 of US Patent No. 7068647 B2.

Regarding claim 40, applicant merely copies the limitation of claim 38 of US Patent No. 7068647 B2.

Regarding claim 41, applicant merely copies the limitation of claim 40 of US Patent No. 7068647 B2.

Regarding claim 42, applicant merely copies the limitation of claim 39 of US Patent No. 7068647 B2.

Regarding claim 43, applicant merely copies the limitation of claim 41 of US Patent No. 7068647 B2.

Regarding claim 44, applicant merely copies the limitation of claim 42 of US Patent No. 7068647 B2.

Regarding claim 45, applicant merely copies the limitation of claim 43 of US Patent No. 7068647 B2

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 31, 2, 17, 32, 3, 15, 18, 30, 33, 45, 4, 6, 19, 34, 21, 36, 5, 20, 35, 7, 22, 37, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US 6958992 B2) in view of Schuster et al. (US 6822957 B1).

Regarding claims 1, 31, Lee et al. disclose a method, system for configuring an IP telephone (Fig. 3, Fig. 6, column 1, lines 39 – 42), comprising: receiving an identifier from the IP telephone (Fig. 3, element 320 Service Provider ID, column 3, lines 23 – 32); determining if the identifier is valid (Fig. 3, column 3, lines 33 – 39); determining if a MAC ID for the IP telephone is valid (Fig. 3, column 3, lines 33 – 39); if the MAC ID is determined to be valid, determining if the identifier is valid (Fig. 4, column 4, lines 12 – 24).

Lee et al. do not disclose if the identifier is valid, assigning a range of port numbers to the IP telephone based on the identifier, wherein the IP telephone is operable to use at least a subset of the range of port numbers to send or receive IP communications.

Schuster et al. teach if the identifier is valid, assigning a range of port numbers to the IP telephone based on the identifier, wherein the IP telephone is operable to use at least a subset of the range of port numbers to send or receive IP communications (column 13, lines 1 – 27, 40 – 42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Lee et al. to include the features of if the identifier is valid, assigning a range of port numbers to the IP telephone based on the identifier, wherein the IP telephone is operable to use at least a subset of the range of port numbers to send or receive IP communications as taught by Schuster et al. in order to provide a method for distributed network address translation in a network telephony system (as suggested by Schuster et al., see column 3, lines 19 – 21).

Regarding claims 2, 17, 32, Lee et al. disclose open port request with the MAC address, the set type, and the IP address to the set registration process. Lee et al. do not disclose explicitly the method, system claimed wherein said range of port numbers comprises ports which are not reserved for use by other IP protocols.

Schuster et al. teach the method, system claimed wherein said range of port numbers comprises ports which are not reserved for use by other IP protocols (“request a set of locally unique ports from router for external communications”, “assigned thirty-two locally unique ports in the range of 1026 – 1057” correlates to operable to use at least a subset of the range of port numbers to send or receive IP communications; column 11, lines 1 – 12; column 16, lines 13 – 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Lee et al. to include the features of the method, system claimed wherein said range of port numbers comprises ports which are not reserved for use by other IP protocols as taught by Schuster et al. in order to provide a method for distributed network address translation in a network telephony system (as suggested by Schuster et al., see column 3, lines 19 – 21).

Regarding claims 3, 15, 18, 30, 33, 45, Lee et al. disclose the method, and system claimed further comprising: mediating IP communications between the IP telephone and an IP device (“registered IP phone on the IP phone switch” correlates to mediating IP communications between the IP telephone and an IP device, Fig. 4, column 4, lines 8 – 16).

Lee et al. do not disclose explicitly wherein the IP telephone uses at least a subset of the range of port numbers to send or receive said IP communications.

Schuster et al. teach wherein the IP telephone uses at least a subset of the range of port numbers to send or receive said IP communications (“request a set of locally unique ports from router for external communications”, “assigned thirty-two locally unique ports in the range of 1026 – 1057” correlates to operable to use at least a subset of the range of port numbers to send or receive IP communications; column 11, lines 1 – 12; column 16, lines 13 – 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Lee et al. to include the features of wherein the IP telephone uses at least a subset of the range of port numbers to send or

receive said IP communications as taught by Schuster et al. in order to provide a method for distributed network address translation in a network telephony system (as suggested by Schuster et al., see column 3, lines 19 – 21).

Regarding claims 4, 6, 19, 34, 21, 36, Lee et al. disclose the method, system claimed, wherein said mediating the IP communications (Fig. 4, Fig. 4, column 4, lines 8 – 16) comprises: receiving a data packet from the IP telephone (“send a request for registration” correlates to receiving a data packet from the IP telephone, Fig. 3, column 3, lines 16 – 19) and sending the data packet to the IP device (“send a request for registration to the IP phone switch” correlates to send a data packet to the IP device, Fig. 3, column 3, lines 16 – 19).

Lee et al. do not disclose explicitly performing a network address persistent port translation (NAPPT) on the data packet.

Schuster et al. teach performing a network address persistent port translation (NAPPT) on the data packet (“Network Address Translation” correlates to network address persistent port translation (NAPPT) on the data packet, Fig. 9, column 15, lines 32 – 47).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Lee et al. to include the features of performing a network address persistent port translation (NAPPT) on the data packet as taught by Schuster et al. in order to provide a method for distributed network address translation in a network telephony system (as suggested by Schuster et al., see column 3, lines 19 – 21).

Regarding claims 5, 20, 35, Lee et al. disclose the method, system claimed, wherein said mediating the IP communications (Fig. 4, Fig. 4, column 4, lines 8 – 16).

Lee et al. do not disclose explicitly the method, system claimed wherein the data packet comprises a private source IP address, a source port, and destination information associated with the IP device, wherein the private source IP address comprises a private IP address of the IP telephone, and wherein the source port number comprises a port number in the assigned range of port numbers; and wherein said performing a network address persistent port translation (NAPPT) on the data packet comprises changing the private source IP address to a public source IP address while leaving the source port number unchanged, and wherein the public source IP address and the source port number may be used to uniquely identify the IP telephone.

Schuster et al. teach the method, system claimed wherein the data packet comprises a private source IP address (“local IP address” correlates to private source IP address; column 3, lines 2 – 3), a source port number (“locally unique port” correlates to a source port number; column 3, lines 20 – 22), and destination information associated with the IP device (“a common external network address” correlates to destination information associated with the IP device; column 3, lines 24 – 32), wherein the private source IP address comprises a private IP address of the IP telephone, and wherein the source port number comprises a port number in the assigned range of port numbers (column 3, lines 20 – 32; column 8, lines 45 – 50; column 10, lines 23 – 32; “request a set of locally unique ports from router for external communications”, “assigned thirty-two locally unique ports in the range of 1026 – 1057” correlates to operable to use at least a subset of the range of port numbers to send or receive IP communications; column 11, lines 1 – 12; column 16,

lines 13 – 20); and wherein said performing a network address persistent port translation (NAPPT) on the data packet comprises changing the private source IP address to a public source IP address while leaving the source port number unchanged, and wherein the public source IP address and the source port number may be used to uniquely identify the IP telephone (Fig. 9, column 15, lines 32 – 47; column 16, lines 13 – 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Lee et al. to include the features of claimed wherein the data packet comprises a private source IP address, a source port, and destination information associated with the IP device, wherein the private source IP address comprises a private IP address of the IP telephone, and wherein the source port number comprises a port number in the assigned range of port numbers; and wherein said performing a network address persistent port translation (NAPPT) on the data packet comprises changing the private source IP address to a public source IP address while leaving the source port number unchanged, and wherein the public source IP address and the source port number may be used to uniquely identify the IP telephone as taught by Schuster et al. in order to provide a method for distributed network address translation in a network telephony system (as suggested by Schuster et al., see column 3, lines 19 – 21).

Regarding claims 7, 22, 37, Lee et al. disclose the method, system claimed, wherein said mediating the IP communications (Fig. 4, Fig. 4, column 4, lines 8 – 16).

Lee et al. do not disclose explicitly the method, system claimed wherein the data packet comprises a public destination IP address, a destination port number; and source information associated with the IP device, wherein the destination port number comprises a

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port number in the assigned range of port numbers, and wherein the public destination IP address and the destination port number may be used to uniquely identify the IP telephone; and wherein said performing a network address persistent port translation (NAPPT) on the data packet comprises using the public destination IP address and the destination port number to uniquely identify the IP telephone, and changing the public destination IP address to a private destination IP address while leaving the destination port number unchanged, wherein the private IP address comprises an IP address of the IP telephone.

Schuster et al. teach the method, system claimed wherein the data packet comprises a public destination IP address, a destination port number; and source information associated with the IP device, wherein the destination port number comprises a port number in the assigned range of port numbers, and wherein the public destination IP address and the destination port number may be used to uniquely identify the IP telephone (column 3, lines 20 – 32; column 8, lines 45 – 50; column 10, lines 23 – 32; column 16, lines 13 – 20); and wherein said performing a network address persistent port translation (NAPPT) on the data packet comprises using the public destination IP address and the destination port number to uniquely identify the IP telephone, and changing the public destination IP address to a private destination IP address while leaving the destination port number unchanged, wherein the private IP address comprises an IP address of the IP telephone (Fig. 9, column 15, lines 32 – 47; column 16, lines 13 – 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Lee et al. to include the features of the method, system claimed wherein the data packet comprises a public destination IP address, a destination port number; and source information associated with the IP device,

wherein the destination port number comprises a port number in the assigned range of port numbers, and wherein the public destination IP address and the destination port number may be used to uniquely identify the IP telephone; and wherein said performing a network address persistent port translation (NAPPT) on the data packet comprises using the public destination IP address and the destination port number to uniquely identify the IP telephone, and changing the public destination IP address to a private destination IP address while leaving the destination port number unchanged, wherein the private IP address comprises an IP address of the IP telephone as taught by Schuster et al. in order to provide a method for distributed network address translation in a network telephony system (as suggested by Schuster et al., see column 3, lines 19 – 21).

Regarding claim 16, Lee et al. disclose a system for performing IP telephony (Fig. 1, Fig. 8A column 2, lines 19 – 25), comprising: a network (“over a LAN” correlates to a network; Fig. 1, column 2, line 19 – 25); an IP telephone (“element 102, IP phone” correlates to IP telephone; Fig. 1, element 102, column 2, lines 26 – 31); a Service Gateway, wherein the Service Gateway is operable to couple to the IP telephone through the network (“element 100, IP phone switch” correlates to a Service Gateway, column 2, lines 22 – 25, 38 – 44); wherein the IP telephone is operable to send an identifier to the Service Gateway (column 2, lines 31 – 34); wherein the Service Gateway is operable to: receive an identifier from the IP telephone (Fig. 3, element 320 Service Provider ID, column 3, lines 23 – 32); determine if the identifier is valid (Fig. 3, column 3, lines 33 – 39); receiving an identifier from the IP telephone (Fig. 3, element 320 Service Provider ID, column 3, lines 23 – 32); determining if a MAC ID for the IP telephone is valid (Fig. 3,

column 3, lines 33 – 39); if the MAC ID is determined to be valid, determining if the identifier is valid (Fig. 4, column 4, lines 12 – 24) and

Lee et al. do not disclose explicitly if the identifier is valid, assign a range of port numbers to the IP telephone based on the identifier; wherein the IP telephone is operable to use at least a subset of the range of port numbers to send or receive IP communications.

Schuster et al. teach if the identifier is valid, assign a range of port numbers to the IP telephone based on the identifier; wherein the IP telephone is operable to use at least a subset of the range of port numbers to send or receive IP communications (column 8, lines 52 – 55; column 11, lines 1 – 12, column 16, lines 13 – 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Lee et al. to include the features of if the identifier is valid, assigning a range of port numbers to the IP telephone based on the identifier, wherein the IP telephone is operable to use at least a subset of the range of port numbers to send or receive IP communications as taught by Schuster et al. in order to provide a method for distributed network address translation in a network telephony system (as suggested by Schuster et al., see column 3, lines 19 – 21).

9. Claims 8, 23, 38, 10, 25, 40, 11, 12, 26, 27, 41, 42, 13, 28, 43, 14, 29, 44, rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US 6958992 B2) and Schuster et al. (US 6822957 B1) as applied to claims 1, 31, 2, 17, 32, 3, 15, 18, 30, 33, 45, 4, 6, 19, 34, 21, 36, 5, 20, 35, 7, 22, 37, 16 above, and further in view of Fijolek et al. (US 6577642 B1).

Regarding claims 8, 23, 38, Lee et al. disclose the limitation of a method, system for configuring an IP telephone (Fig. 3, Fig. 6, column 1, lines 39 – 42), comprising: receiving an identifier from the IP telephone (Fig. 3, element 320 Service Provider ID, column 3, lines 23 – 32). However, Lee et al. and Schuster et al. does not disclose expressly the method, system claimed wherein the identifier comprises a vendor class identifier.

Fijolek et al. teach the method, system claimed wherein the identifier comprises a vendor class identifier (column 10, lines 60 – 67; column 11, lines 5 – 9; column 11 – 12, Table 1).

Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Lee et al. and Schuster et al. to include the features of the method, system claimed wherein the identifier comprises a vendor class identifier as taught by Fijolek et al. in order to provide a variety of service offerings via and through a data-over-cable system, an exemplary data-over-cable system with telephony return includes customer premise equipment (e.g. a customer computer), a cable modem, a cable modem termination system, a cable television network, a public switched telephone network, a telephony remote access concentrator and a data network (e.g. the Internet). The cable modem termination system and the telephony remote access concentrator together are called a "telephony return termination system (as suggested by Fijolek et al., see column 5, lines 4 – 5; column 1, lines 65 – 67; column 2, lines 1 – 7).

Regarding claims 10, 25, 40, Lee et al. disclose the limitation of a method, system for configuring an IP telephone (Fig. 3, Fig. 6, column 1, lines 39 – 42), comprising:

receiving an identifier from the IP telephone (Fig. 3, element 320 Service Provider ID, column 3, lines 23 – 32).

Lee et al. and Schuster et al. does not disclose explicitly the method, system claimed wherein said identifier is comprised in a DHCP discover message, the method further comprising: issuing a DHCP offer to the IP telephone if the identifier is determined to be valid, wherein the DHCP offer comprises DHCP lease information based on the validated identifier; the IP telephone issuing a DHCP request in response to the issued DHCP offer; storing the DHCP lease information in response to the issued DHCP request; the IP telephone storing the DHCP lease information; and the IP telephone enabling DHCP settings comprised in the DHCP lease information.

Fijolek et al. teach the method, system claimed wherein said identifier is comprised in a DHCP discover message, the method further comprising: issuing a DHCP offer to the IP telephone if the identifier is determined to be valid, wherein the DHCP offer comprises DHCP lease information based on the validated identifier (Fig. 13, elements 270, 278, 280, 282, 286; column 25, lines 40 – 63); the IP telephone issuing a DHCP request in response to the issued DHCP offer; storing the DHCP lease information in response to the issued DHCP request; the IP telephone storing the DHCP lease information; and the IP telephone enabling DHCP settings comprised in the DHCP lease information (Fig. 13, elements 300, 302, 308, 312, 318, 322, 320, 324; column 25, lines 40 – 63; column 26, lines 44 – 64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Lee et al. and Schuster et al. to include the features of the method, system claimed wherein said identifier is comprised in a DHCP discover message, the method further comprising: issuing a DHCP offer to the IP telephone

if the identifier is determined to be valid, wherein the DHCP offer comprises DHCP lease information based on the validated identifier; the IP telephone issuing a DHCP request in response to the issued DHCP offer; storing the DHCP lease information in response to the issued DHCP request; the IP telephone storing the DHCP lease information; and the IP telephone enabling DHCP settings comprised in the DHCP lease information as taught Fijolek et al. in order to provide a variety of service offerings via and through a data-over-cable system, an exemplary data-over-cable system with telephony return includes customer premise equipment (e.g. a customer computer), a cable modem, a cable modem termination system, a cable television network, a public switched telephone network, a telephony remote access concentrator and a data network (e.g. the Internet). The cable modem termination system and the telephony remote access concentrator together are called a "telephony return termination system (as suggested by Fijolek et al., see column 5, lines 4 – 5; column 1, lines 65 – 67; column 2, lines 1 – 7).

Regarding claims 11, 12, 26, 27, 41, 42, Lee et al. disclose a method, system for configuring an IP telephone (Fig. 3, Fig. 6, column 1, lines 39 – 42), comprising: receiving an identifier from the IP telephone (Fig. 3, element 320 Service Provider ID, column 3, lines 23 – 32) and Schuster et al. disclose the method, system claimed, wherein the range of port numbers and information indicating operational software for the IP telephone (column 5, lines 55 – 67; column 13, lines 14 – 21; column 16, lines 13 – 20), the method further comprising: the IP telephone executing the indicated operational software to enable said IP communications (column 13, lines 14 – 21; column 16, lines 13 – 20; column 6, lines 3 – 23).

However, Lee et al. and Schuster et al. do not disclose expressly the method, system of claimed wherein said DHCP lease information.

Fijolek et al. teach the method, system of claimed wherein said DHCP lease information (column 24, lines 40 – 67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schuster et al. to include of the method, system of claimed wherein said DHCP lease information such as that taught by Fijolek et al. in order to provide a variety of service offerings via and through a data-over-cable system, an exemplary data-over-cable system with telephony return includes customer premise equipment (e.g. a customer computer), a cable modem, a cable modem termination system, a cable television network, a public switched telephone network, a telephony remote access concentrator and a data network (e.g. the Internet). The cable modem termination system and the telephony remote access concentrator together are called a “telephony return termination system (as suggested by Fijolek et al., see column 5, lines 4 – 5; column 1, lines 65 – 67; column 2, lines 1 – 7).

Regarding claims 13, 28, 43, Lee et al. disclose the method, system claimed wherein said issuing the request for the operational software comprises issuing a read request to a file transfer server, wherein said file transfer server performs said providing the operational software to the IP telephone (Fig. 3, column 3, lines 21 – 32).

Regarding claims 14, 29, 44, Lee et al. disclose the method, system claimed wherein the file transfer server comprises a TFTP (Trivial File Transfer Protocol) server (Fig. 3, Fig. 4, Fig. 5, Fig. 6, element 304 TFTP server, column 2, lines 42 – 44).

Response to Arguments

10. Applicant's arguments filed on 6/13/2007 with respect to claims 1 – 8, 10 – 23, 25 – 38, 40 – 45 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Xu et al. (US 6738362) teach mobile internet protocol (IP) networking with home agent and/or foreign agent functions distributed among multiple devices.
- b) Kung et al. (US 6775273) teach simplified IP service control and service control based on multiple relationships between equipment specific unique media access control (MAC) addresses, system addresses and directory numbers to enable the properly route traffic between the broadband communication system and legacy telephone systems.
- c) Mahler et al. (US 6381638) disclose system and method for options based address reuse and a combination network address for identifying the host device to the server device.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew C. Lee/::<11/04/2007>

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Edan Orgad 11/4/07